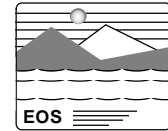


**ESDIS**

# **EOSDIS Technology Expectations**



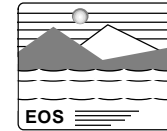
**John T. Dalton**

**Deputy Associate Director**

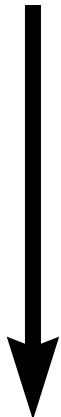
**Office of Mission Operations and Data Systems for Earth  
Science Data and Information System (ESDIS)**

**ESDIS**

## **Risk Mitigation vs Technology Evolution**

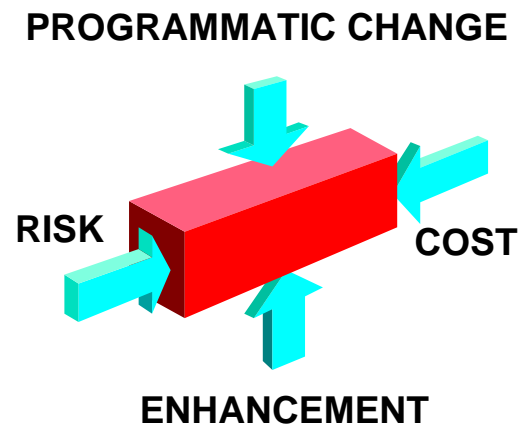


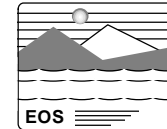
Mission  
Critical



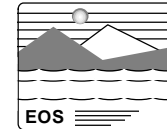
Mission  
Success

- **EOSDIS Functions**
- Control spacecraft and instruments
- Capture and deliver data stream
- Produce and archive products
- Provide base pull services (standard products)
- Provide linkages to SCFs for push and pull services
- Provide infrastructure for linkages to external pull services
- Enable enhanced pull services, anticipate "ripple back" effect to standard products
- Support development of enhanced pull services





- **Research is more likely to succeed in the technology insertion process IF**
  - it is targeted towards EOSDIS architecture / components
  - it recognizes EOSDIS requirements and constraints
  -
- **Research results require**
  - independent technology assessment addressing EOSDIS technology criteria or
  - “self-assessment” by researchers
  -
- **ESDIS approach involves EOSDIS Technology Transfer Testbed (which will be discussed in detail by K. Moe)**
  - easy access for technology demonstrations
  - stricter criteria for accepting technology for test and evaluation (must show promise of cost benefit, functional enhancement)
  -
- **Project plans to release a Cooperative Agreement Notice in early 1996 for further applied research for EOSDIS**



- **Implications of continuing budget constraints**
  - operations cost reductions/automation
  - use of Internet
- **Technology Implications of the La Jolla NRC report**
  - competitively selected data centers with more diverse, less integrated systems
  - more dynamic opportunities for technology insertion
- **Implications of continuing, dramatic growth in info systems technology**
  - leveraging WWW, mass storage, networking advances
- **Working the ECS schedule and finding opportunities for improvements (for example)**
  - VO IMS Web client
  - Hot Java prototyping
  - DBMS migration (Sybase to Illustra in Rel B)
- **Project desires and needs productive interaction with the information systems technology community**